

AMENDMENTS TO THE CLAIMS

Claim 1. (Original) A magnetic fluid treatment device comprising at least one fluid channel, the or each fluid channel having at least two peripherally located magnets, the device being adapted to co-operate with a fluid supply conduit, so that, in use, fluid flowing through the fluid channel is subjected to a magnetic field; wherein the at least two magnets are located on opposite sides of the or each fluid channel and have a separation of less than about 90mm.

Claim 2. (Original) A magnetic fluid treatment device comprising at least one fluid channel, the or each fluid channel having at least one peripherally located magnet; the device being adapted to cooperate with a fluid supply conduit, so that, in use, fluid flowing through the fluid channel is subjected to a magnetic field; the ratio of the cross-sectional area of the fluid supply conduit to the total cross-sectional area of the fluid channel or all of the fluid channels being in the range substantially 1:1.1 to substantially 1:2.8.

Claim 3. (Original) A magnetic fluid treatment device comprising at least one fluid channel, the or each fluid channel having at least one peripherally located magnet, the device being adapted to co-operate with a fluid supply conduit, so that, in use, fluid flowing through the fluid channel is subjected to a magnetic field; wherein a ratio of the width of the at least one fluid supply conduit to the length of a section of the at least one fluid channel along which the at least one magnet extends is in the range of substantially 1:20 to substantially 1:40.

Claim 4. (Original) A magnetic fluid treatment device comprising at least one fluid channel, the or each fluid channel having at least one peripherally located magnet, the device being adapted to co-operate with a fluid supply conduit, so that, in use, fluid flowing through the fluid channel is subjected to a magnetic field; wherein a magnetic field

strength in a section of the at least one fluid channel along which the at least one magnet extends is between substantially 0.02T and substantially 1.0T.

Claim 5. (Original) A magnetic fluid treatment device as claimed in Claim 1 wherein the at least two magnets have a separation of less than about 60mm.

Claim 6. (Original) A magnetic fluid treatment device as claimed in Claim 2 wherein the ratio of the cross-sectional area of the fluid supply conduit to the total cross-sectional area of the or all of the fluid channels is in the range substantially 1:1.2 to 1:2.4.

Claim 7. (Original) A magnetic fluid treatment device as claimed in Claim 3 wherein the ratio of the width of the at least one fluid supply conduit to the length of a section of the at least one fluid channel along which the at least one magnet extends is in the range substantially 1:20 to 1:30.

Claim 8. (Original) A magnetic fluid treatment device as claimed in Claim 4 wherein the magnetic field strength in the section of the at least one fluid channel along which the at least one magnet extends is between substantially 0.025T and 0.5T.

Claim 9. (Currently amended) A magnetic fluid treatment device as claimed in claim 1 ~~any preceding claim~~ where the fluid is a fuel.

Claim 10. (Original) A magnetic fluid treatment device comprising at least one fluid channel, the or each fluid channel having at least one peripherally located magnet, wherein the at least one magnet is removably received in a body section of the device.

Claim 11. (Original) A magnetic fluid treatment device as claimed in Claim 10 wherein the body section is non-ferrous.

Claim 12. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~Claims 10 or 11~~ further comprising at least one internal magnet within the fluid channel.

Claim 13. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~any one of Claims 10 to 12~~ wherein the device is fitted within an existing fluid supply conduit.

Claim 14. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~any one of Claims 10 to 13~~ wherein the device comprises one or more internal replaceable magnetic cartridges held in position inside the device by retaining means into which the removable magnet cartridge(s) will slot, wherein the or each internal replaceable magnetic cartridge splits the fluid channel into subsidiary channels.

Claims 15-16. (Canceled)

Claim 17. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~any one of Claims 10 to 16~~ wherein the ratio of the fluid flow area of the device and/or channels thereof to the fluid flow area of a fluid supply conduit to which the device is attached is substantially 1:1.2 to 1:2.5.

Claims 18-21. (Canceled)

Claim 22. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~any one of Claims 10 to 21~~ wherein the magnets inside the internal magnetic cartridge and/or external magnetic cartridge is/are arranged differently depending on the fluid passing through the magnetic field of the cartridges and a ratio of the width of the fluid supply conduit to which the device is attached to the length of a section of the fluid channel along which the at least one magnet extends.

Claim 23. (Currently amended) A magnetic fluid treatment device as claimed in claim 10 ~~any one of Claims 10 to 22~~ wherein the arrangement of the polarity of the magnets inside the internal magnetic cartridge(s) and/or external magnetic cartridge(s) changes according to the fuel type and quality, fuel temperature, fuel pressure, time between magnetisation and combustion and/or required dwell length ratio of the device.

Claim 24. (Currently amended) A magnetic fluid treatment device as claimed in claim 1 ~~any preceding claim~~ wherein the magnetic field(s) is applied substantially at right angles to the flow of fluid.